

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P881601

Luminaire Tested: **NAV-SB1A-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3605 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

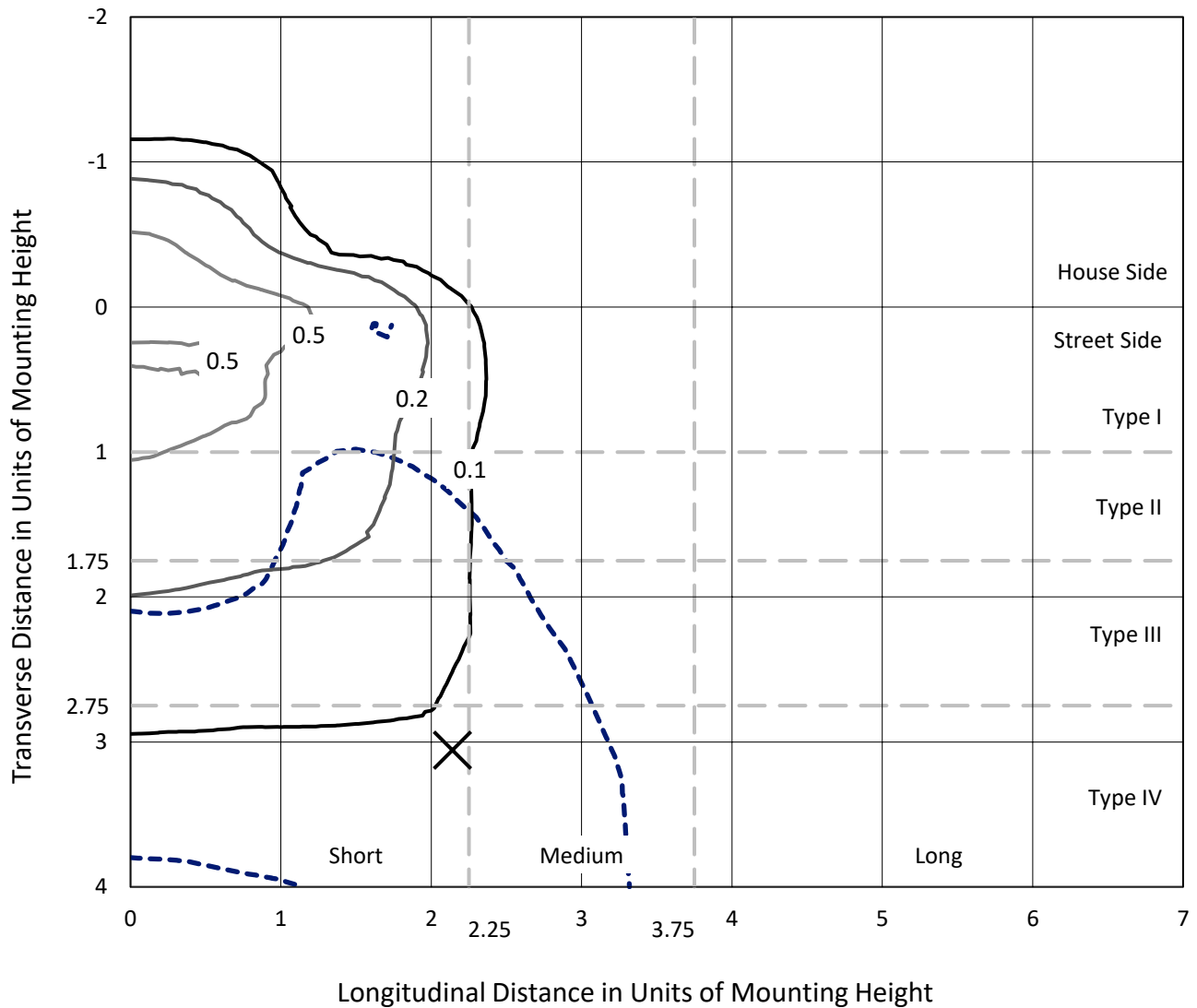
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

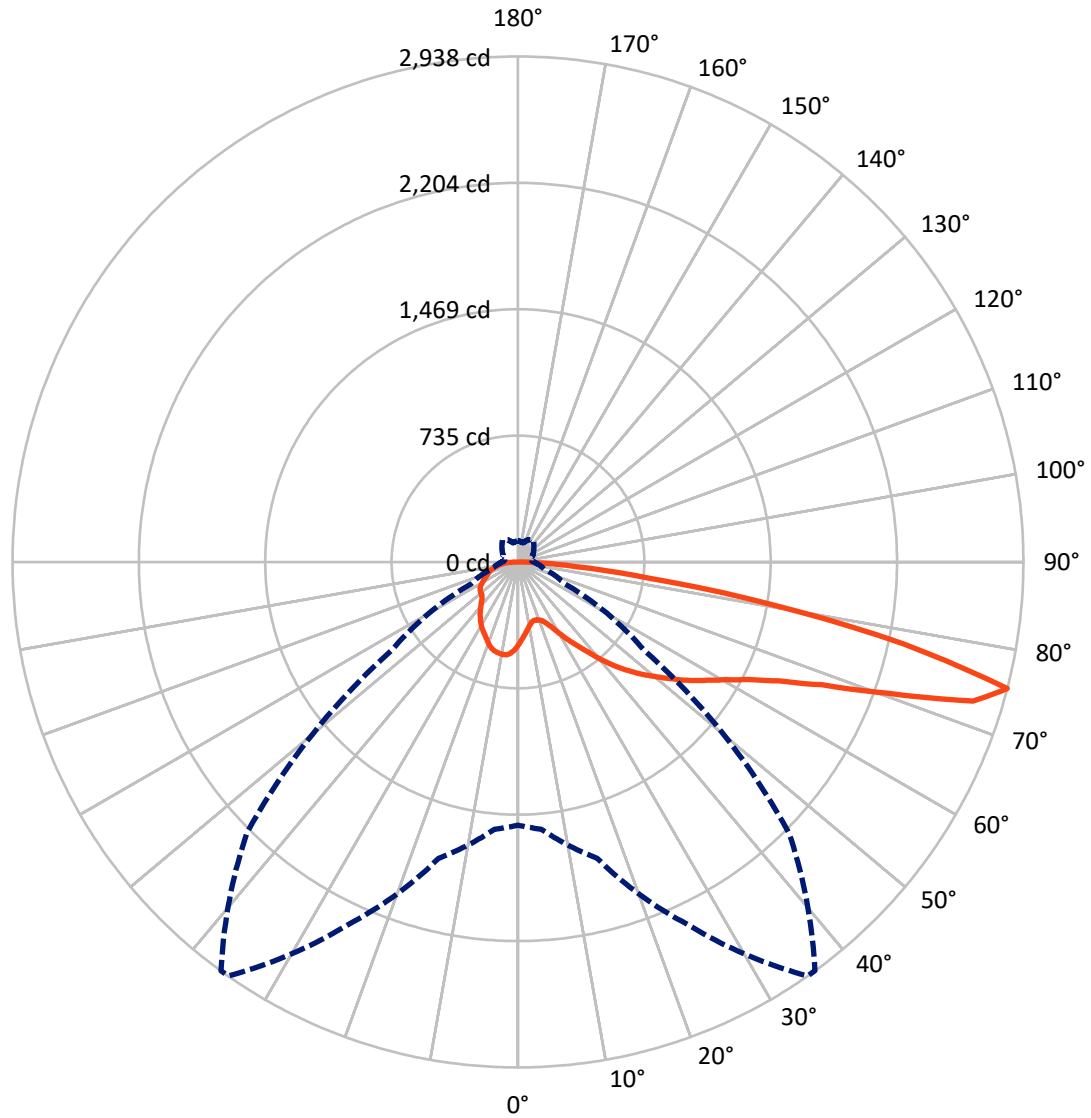
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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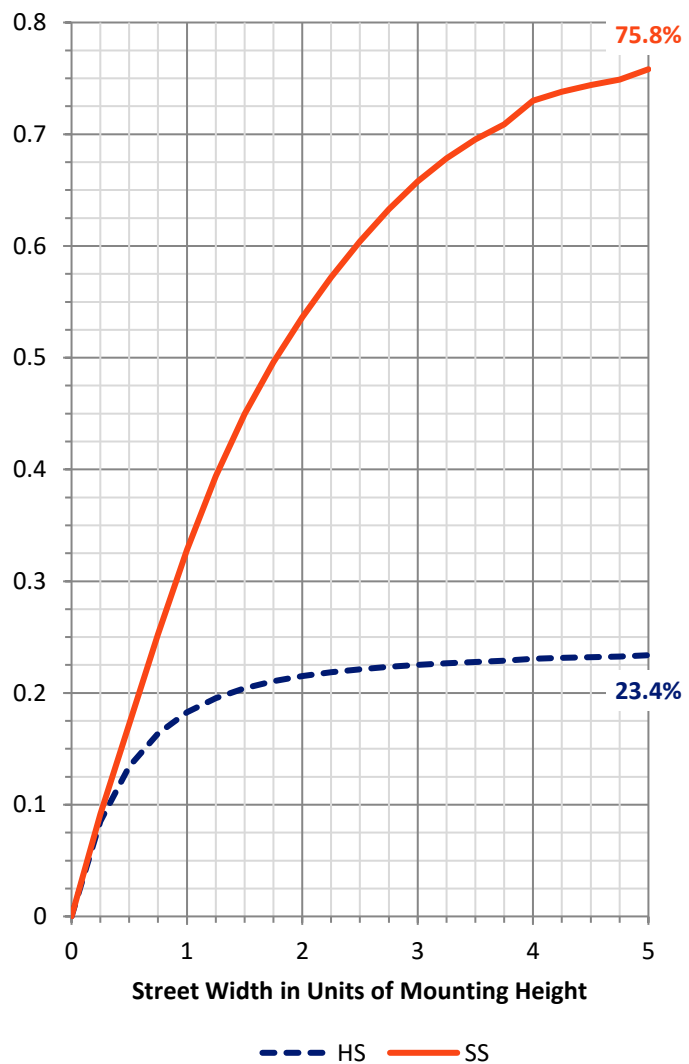
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	857.9	0.0	857.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	2747.1	0.0	2747.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	3605.0	0.0	3605.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	1.3
10°-20°	131.2	3.6
20°-30°	220.3	6.1
30°-40°	342.4	9.5
40°-50°	508.2	14.1
50°-60°	701.6	19.5
60°-70°	851.2	23.6
70°-80°	703.5	19.5
80°-90°	101.2	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3605.0	100.0
0°-180°	3605.0	100.0

Coefficient of Utilization



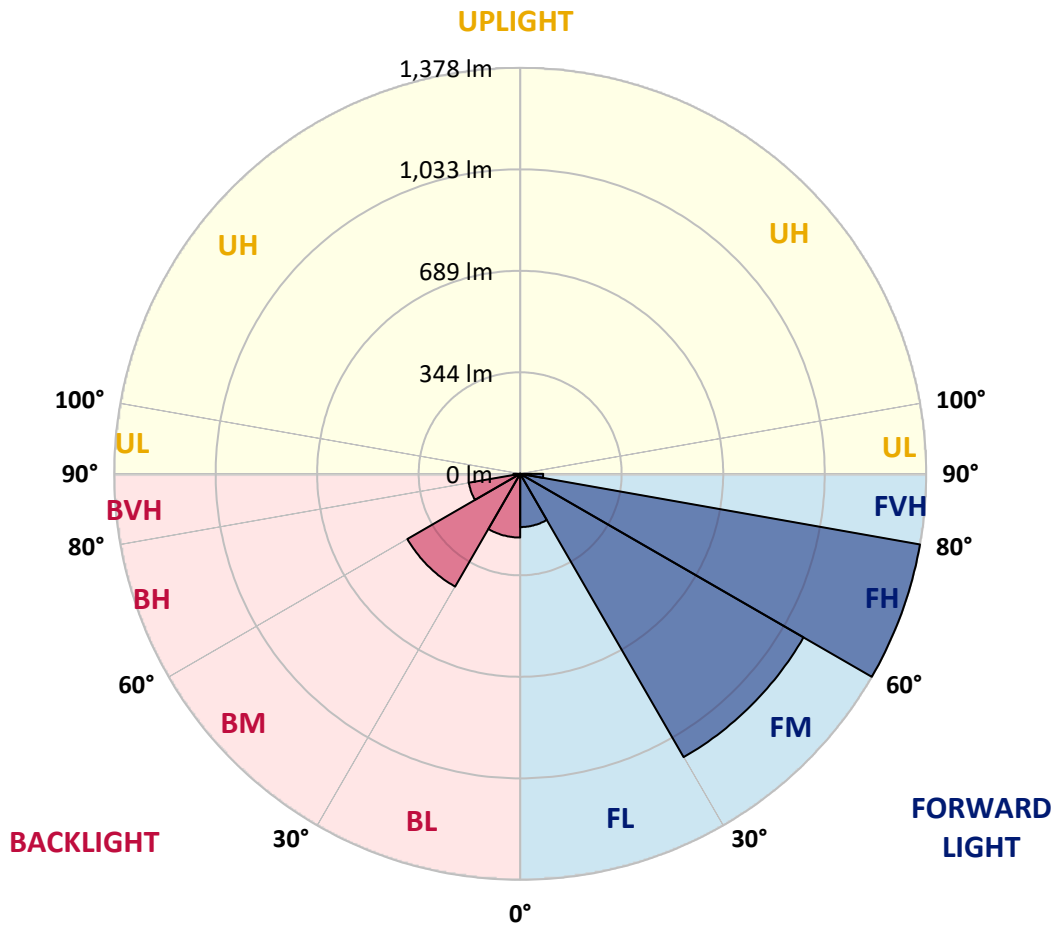
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	180.8	5.0			
FM (30°-60°)	1110.1	30.8			
FH (60°-80°)	1377.8	38.2			G1/1800
FVH (80°-90°)	78.4	2.2			G1/100
BL (0°-30°)	216.2	6.0	B1/500		
BM (30°-60°)	442.0	12.3	B1/1000		
BH (60°-80°)	176.9	4.9	B1/500		G1/500
BVH (80°-90°)	22.8	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4
2.5°	443.0	445.7	446.9	446.3	449.2	448.8	452.9	458.0	465.0	471.8	481.8
5°	408.9	411.8	414.3	416.7	422.3	424.1	430.5	440.2	453.1	466.2	482.5
7.5°	377.1	379.6	383.5	387.8	397.4	399.1	409.8	425.0	443.0	462.1	484.7
10°	351.2	353.7	357.8	362.7	374.6	376.7	390.4	410.6	434.0	458.2	487.0
12.5°	340.1	340.9	343.2	348.1	358.4	359.8	374.8	398.0	425.2	455.3	490.5
15°	339.5	341.0	341.2	343.8	352.4	352.9	366.8	389.8	419.8	454.7	495.8
17.5°	345.3	346.5	344.8	346.3	353.5	354.5	365.4	385.9	418.0	457.2	504.8
20°	360.9	361.9	356.6	354.5	359.8	360.5	371.3	388.4	419.8	462.5	517.0
22.5°	394.1	394.6	381.8	373.0	373.4	373.8	383.1	398.7	426.6	472.0	532.6
25°	445.7	445.3	424.8	407.9	398.1	396.0	402.2	415.5	438.1	484.7	552.7
27.5°	506.1	503.2	482.7	457.4	436.2	433.0	431.7	437.3	454.5	501.4	577.2
30°	574.3	571.6	549.6	516.4	487.0	481.9	469.1	466.2	478.8	524.2	611.4
32.5°	649.2	647.4	621.1	581.0	541.6	535.7	514.1	506.3	516.2	558.7	658.9
35°	711.9	710.4	688.5	647.2	599.1	591.9	569.8	561.1	566.1	603.0	721.1
37.5°	768.6	767.8	749.1	716.6	666.9	658.1	633.4	630.5	629.5	661.2	796.5
40°	821.2	819.3	799.8	782.7	745.8	737.8	716.0	713.5	706.1	733.0	881.9
42.5°	879.5	874.4	846.2	838.2	828.3	821.6	808.6	809.0	792.6	813.8	972.3
45°	927.1	924.1	895.1	890.4	901.1	898.4	909.7	912.6	880.9	898.6	1066.2
47.5°	978.1	975.4	950.8	947.5	976.6	977.3	1017.3	1018.3	967.0	986.7	1160.3
50°	1041.1	1037.2	1012.8	1016.9	1049.5	1052.4	1125.5	1118.8	1046.3	1076.2	1253.7
52.5°	1082.6	1084.9	1079.7	1086.3	1130.7	1133.4	1231.9	1214.9	1124.9	1164.4	1345.3
55°	1113.2	1117.9	1134.2	1149.4	1216.5	1219.2	1332.2	1306.3	1190.0	1246.3	1431.4
57.5°	1152.5	1145.9	1176.5	1206.1	1297.9	1305.1	1429.9	1394.4	1247.7	1316.8	1490.5
60°	1209.1	1204.4	1228.2	1272.0	1389.1	1400.6	1533.2	1473.7	1289.9	1372.8	1502.0
62.5°	1323.7	1312.0	1315.7	1354.4	1504.1	1519.3	1649.7	1542.9	1311.0	1394.6	1440.4
65°	1495.0	1474.9	1456.2	1483.1	1666.1	1681.1	1781.2	1597.3	1303.2	1352.3	1276.9
67.5°	1710.7	1690.8	1667.8	1693.2	1904.6	1916.5	1943.6	1627.9	1241.8	1189.4	987.9
70°	1888.6	1881.2	1908.7	2013.0	2285.6	2286.0	2151.7	1602.5	1073.6	843.3	571.6
72.5°	1865.0	1860.6	2005.4	2327.7	2765.8	2755.5	2348.7	1410.8	723.2	380.4	214.2
75°	1530.0	1559.1	1783.4	2322.1	2938.3	2936.9	2228.1	896.9	299.1	157.7	110.7
77.5°	820.5	866.5	1157.8	1714.4	2293.8	2328.3	1566.5	313.8	128.4	101.0	76.6
80°	267.6	307.7	461.5	872.9	1490.5	1484.0	671.4	123.2	87.9	71.5	53.0
82.5°	113.6	118.3	206.2	412.2	764.9	753.0	213.8	70.7	61.8	48.9	32.7
85°	44.4	49.7	91.0	190.6	331.3	324.1	77.2	35.1	39.6	32.0	19.5
87.5°	14.6	17.7	32.5	65.3	103.1	99.4	18.9	12.1	17.1	14.6	7.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4	480.4
2.5°	484.5	487.6	491.3	496.8	501.4	505.3	509.4	512.0	512.9	515.9	515.7
5°	488.0	494.8	504.0	512.9	521.7	527.0	531.6	534.0	536.1	537.7	538.1
7.5°	493.8	502.6	517.0	528.7	536.1	540.4	543.5	542.8	543.5	543.9	544.5
10°	498.9	511.2	528.3	539.4	545.1	545.3	544.5	541.8	540.4	540.6	541.0
12.5°	504.9	518.6	537.1	546.5	548.0	543.7	540.4	535.7	534.0	533.2	532.8
15°	513.1	528.7	546.7	550.2	546.3	540.8	535.2	527.6	523.7	520.5	521.5
17.5°	523.1	540.2	554.1	551.5	543.1	534.2	525.0	513.5	505.5	502.2	502.4
20°	536.9	552.3	559.7	548.6	535.9	522.3	506.7	492.7	485.3	481.9	481.6
22.5°	553.7	568.5	565.2	543.5	525.6	503.8	484.3	474.0	470.3	467.9	468.3
25°	573.7	586.4	569.1	536.1	508.6	479.2	464.2	460.9	459.1	457.4	457.4
27.5°	599.9	606.7	572.0	525.2	482.1	453.1	447.7	448.2	447.7	444.7	445.3
30°	634.3	633.0	574.7	507.5	451.7	429.5	429.9	432.4	432.8	430.9	431.9
32.5°	679.8	665.9	576.1	484.5	422.7	408.9	409.3	412.0	413.9	410.6	412.2
35°	734.7	704.3	573.9	455.6	400.3	389.2	386.3	387.0	387.6	384.5	386.7
37.5°	798.8	747.4	564.4	423.7	381.8	369.9	363.7	358.4	355.3	352.4	354.3
40°	869.2	794.3	546.8	392.5	361.1	349.4	340.1	330.1	319.6	315.7	317.5
42.5°	942.9	842.7	525.6	362.7	337.3	327.8	317.9	303.4	287.6	279.7	280.6
45°	1019.2	892.2	504.8	333.3	313.0	308.9	297.4	280.0	262.9	252.8	252.0
47.5°	1094.1	939.0	474.2	303.6	290.2	294.7	285.7	269.7	250.6	234.6	232.9
50°	1165.6	982.8	424.1	273.6	271.7	290.4	281.8	258.8	237.0	216.5	214.8
52.5°	1236.5	1018.3	360.0	246.3	261.7	289.2	276.7	251.4	224.7	203.3	200.9
55°	1296.8	1036.6	298.2	222.9	247.3	279.3	270.7	242.6	207.4	184.6	182.6
57.5°	1331.1	1021.8	246.7	200.0	227.4	262.9	260.4	223.9	186.7	169.2	166.8
60°	1316.3	961.8	204.6	179.9	208.5	245.2	242.4	205.4	170.9	154.3	152.0
62.5°	1234.6	847.4	171.3	162.3	191.4	227.0	224.5	191.2	158.8	142.9	140.3
65°	1070.1	689.3	145.4	147.7	174.0	205.2	208.9	179.3	149.3	133.7	131.2
67.5°	816.2	499.3	125.1	135.1	157.1	183.8	194.5	170.7	141.3	126.5	124.1
70°	465.2	283.6	108.0	122.8	142.1	163.9	183.4	163.9	132.7	120.4	118.9
72.5°	176.4	130.2	93.3	110.5	127.6	147.1	171.1	153.2	122.8	113.6	112.1
75°	94.1	79.3	78.5	96.1	111.1	130.8	155.7	142.7	115.4	120.0	123.9
77.5°	64.1	56.1	65.7	82.2	93.0	112.6	139.3	126.7	100.0	99.6	91.8
80°	44.4	39.8	53.4	66.3	71.9	94.7	121.6	108.7	81.5	76.0	72.7
82.5°	26.7	25.9	40.0	49.5	50.9	73.1	100.8	91.2	66.7	58.1	58.5
85°	14.6	15.4	25.5	29.0	29.6	51.1	78.9	70.5	51.3	43.1	43.5
87.5°	4.1	5.3	9.4	11.5	14.2	26.5	47.0	41.9	25.7	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)